

Kindergarten: Post-Curriculum Activities

Cleanup Time!

Materials and Time:

- 40 minutes
- Gloves
- Bags/ or buckets

State Standard:

Communicate solutions that will reduce the impact of humans on the land, water, air, and/or other living things in the local environment.

Objectives:

- Students will learn the importance of protecting the environment.
- Students will understand that they can contribute to the protection of the environment.

Anticipatory Set/ Linking to Prior Knowledge:

- What are some ways that we can help our environment?
- Have you seen anything today that we could change around our school?

Instructions:

Plan a route around your school before hand, making sure the areas you visit have something that is a problem for the environment. For example, too much litter near the library, an office where worksheets are not double sided or incandescent bulbs are used, etc. Take your students on a quick walk along this route; asking them to point out ways they see that we are not helping the environment or ways that we could help it more. Keep a list of their ideas. After walking around, head over to an area (the lunch area or playground would suffice) that has a decent amount of litter. Gear up your students, telling them that picking up after themselves can help the environment quite a bit. Turn it into a race if you must, daring them to accept this eco-challenge and clean it as quickly as possible as a team. Toss the waste, and recycle what can be recycled. Once finished, troop back into the classroom. Write the problems the students had stated earlier on the board. Hand each student a sheet of paper, asking them to fold it in half, horizontally ("hamburger style"). On one side they will draw one of the problems you wrote on the board (or they can copy the word down *and* draw a picture of it). On the other, you will ask them to draw a picture of a possible solution. For example, if one of the problems is that there are not enough trees around, a solution could be to plant more trees, and they might draw a tree being planted.

- How can they continue to help the environment on their own? With their families?

Kindergarten: Post-Curriculum Activities

Super Sleuth!

Materials and Time:

- Super Sleuth Worksheet
- Writing utensil

State Standard:

Use a model to represent the relationship between the needs of different plants or animals (including humans) and the places they live.

Objectives:

- Students will understand that animals have specific needs to survive depending on where and how they live.
- Students will understand that all species share certain necessities.

Anticipatory Set/ Linking to Prior Knowledge:

- What are some things that you need to survive?
- Do the things we need to survive depend on where we live? On what we do?
- Does this apply to animals and plants too?

Instructions:

The students will each receive a worksheet with the three “criminal” animals. Inform them that they are now super sleuths and that they are in charge of solving the mystery before them. Using the knowledge they gained at Biotrek, they will try to identify which animal did what. For example, they should recall that a tree dwelling animal needs strong claws and tail, thus the iguana is most likely the mango thief. Have them circle the evidence, and write the name of the criminal on the provided line.

Super Sleuth!

Three criminals, and only one super sleuth—you! Follow the clues below to discover which of these scoundrels did what. Circle the body parts the animal used.

Mango Thief:

With the help of his sharp claws, this crook climbed high up in the tree to steal the mangos. He tried to run away by jumping out of the trees and into a river. Using his strong tail as a paddle, he almost escaped.

Who did it? _____

Banana Burglar:

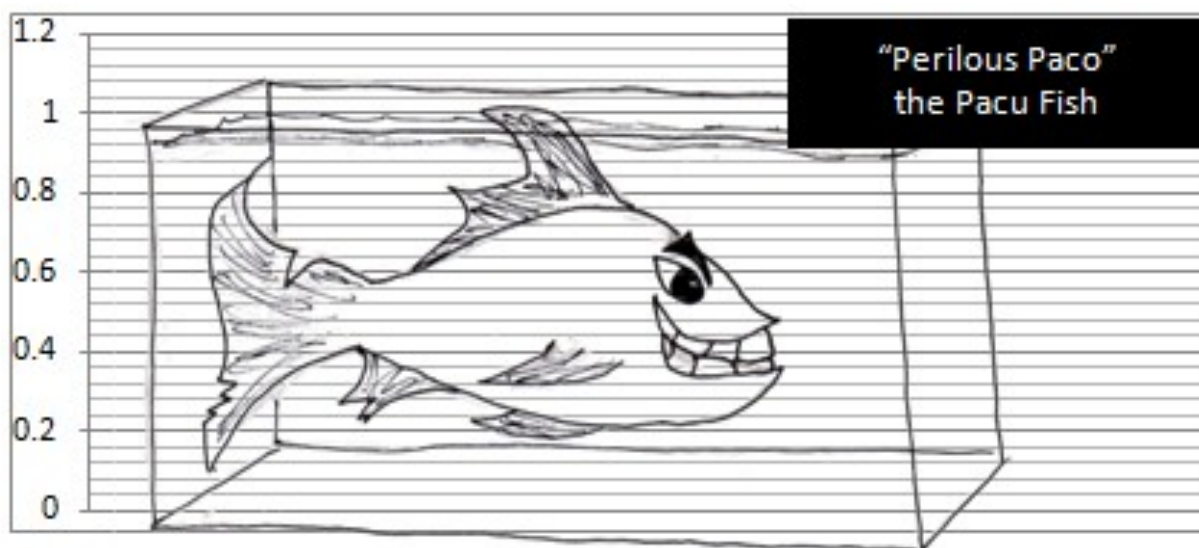
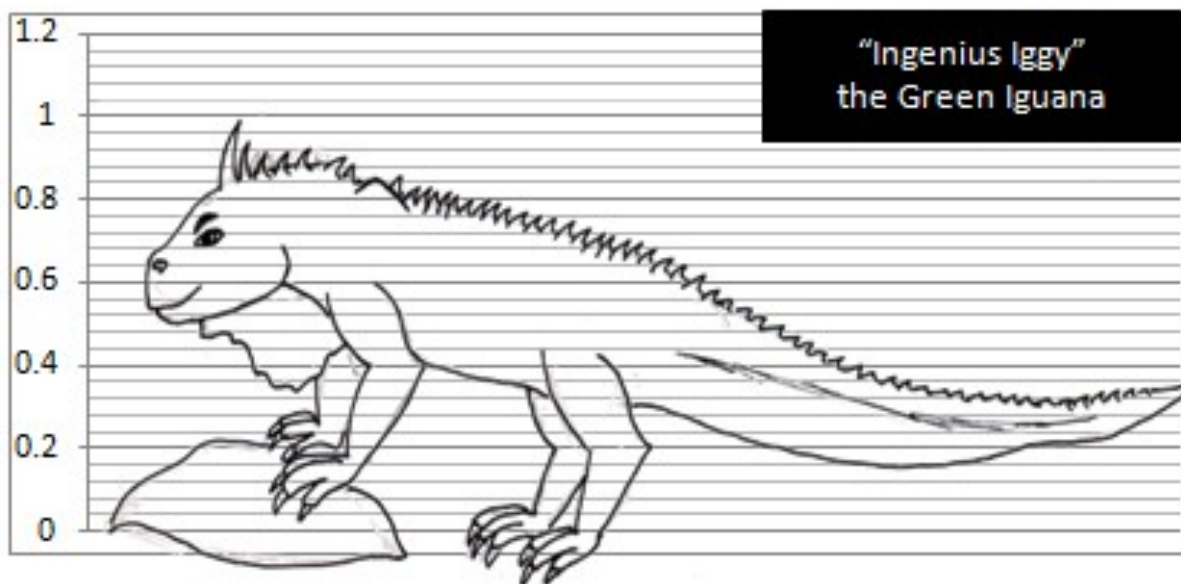
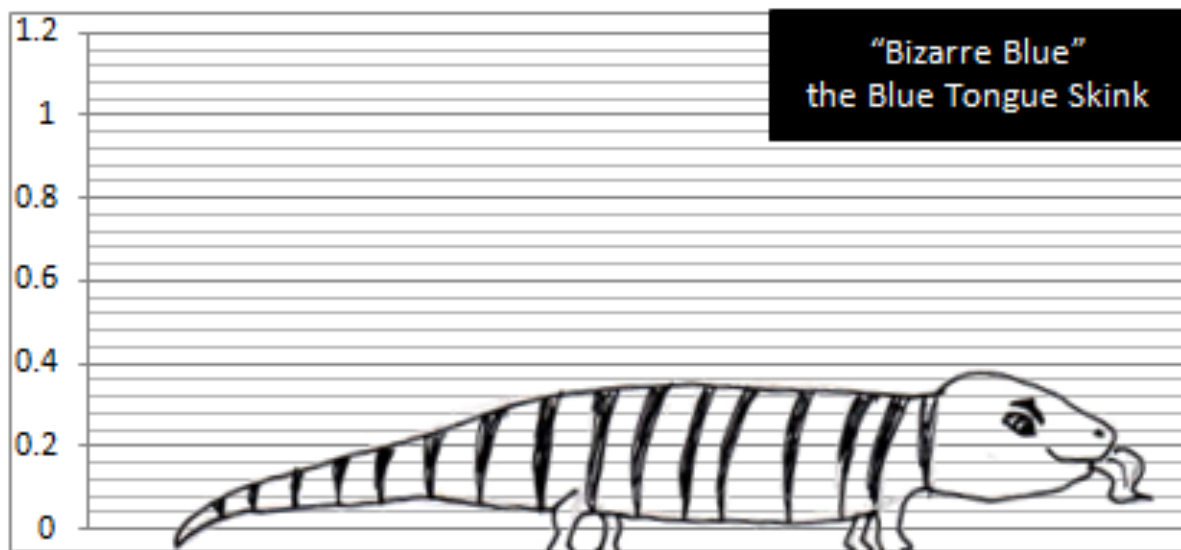
A long tongue helped this bandit gobble up a storekeeper's banana. He couldn't run fast with his short legs, but he slithered away quickly in the tall grasses for a while until we caught him.

Who was it? _____

Nut Thief:

This fellow stole some nuts that fell into a river. Then he crushed and ate them with his big teeth. There was a high speed water chase before he was caught.

Who did it? _____



Kindergarten: Post-Curriculum Activities

Pick the Part

Materials and Time:

- *Pick the Part* Worksheet
- Writing utensil

State Standard:

Use a model to represent the relationship between the needs of different plants or animals (including humans) and the places they live.

Objectives:

- Students will understand that animals have specific needs to survive depending on where and how they live.
- Students will understand that all species share certain necessities.

Anticipatory Set/ Linking to Prior Knowledge:

- What are some things that you need to survive?
- Do the things we need to survive depend on where we live? On what we do?
- Does this apply to animals and plants too?

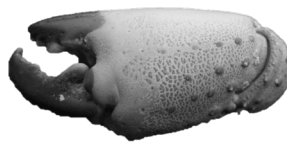
Instructions:

The students will each receive a worksheet asking them to circle the characteristic that will help the organism in question achieve a certain task and survive in its environment. After they have circled the correct drawing, have them explain why as best they can. For example, if a lizard needs to climb trees, they should circle the picture of the iguana leg. In their explanation of why that is so, they may simply state, "It needs sharp claws" or something along those lines.

Pick The Part

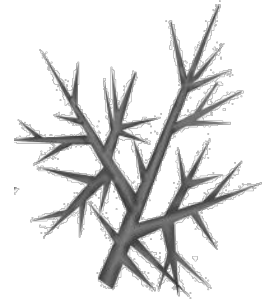
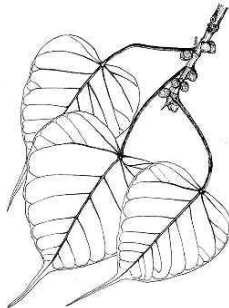
What type of arms would be best if a lizard needs to climb trees?

Why? _____



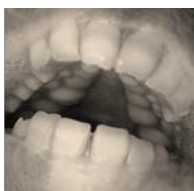
What type of leaf would be best for a plant in a rainforest?

Why? _____



What kind of teeth would be best for eating nuts and fruits?

Why? _____



<https://sp.yimg.com/ib/th?id=JN.z8RsB1wWkzZL22PagjZRH&pid=15.1&P=0&w=279.3.3&h=186.2>



http://thumb10.shutterstock.com/photos/thumbnail_large/995714/139135397.jpg



<http://www.dailykos.com/story/2012/07/10/1108053/-15-Minute-Science-A-Whale-s-Tale-With-A-To-Do>

Kindergarten: Pre and Post-Curriculum Activities

Science Journal

Materials and Time:

- Construction paper
- Markers/Crayons/Colored Pencils
- Glue/Tape
- Yarn and other artistic doodads
- 60 minutes (but over several days)
- Name Page

State Standard:

- Use observations to describe patterns of what plants and animals (including humans) need to survive.

Objectives:

- Students will understand that anyone can be a scientist.
- Students will learn to make observations about the world around them

Anticipatory Set/ Linking to Prior Knowledge:

- Are you a scientist?
- Who can be a scientist?
- What do scientists do? Do you ever do that?
- Can you ask questions? That's something scientists do!!
- What kinds of plants and animals did you see at BioTrek?
- Do you remember what they ate and where they lived?
- What were some of the activities you did at BioTrek?
- What was your favorite part of the trip to BioTrek?

Instructions:

Prior to your adventure to BioTrek, introduce your students to the fact that the occupation of a scientist is not limited to crazy haired, old, white men. Rather, anyone can be a scientist, even themselves, simply because a scientist is a person who is curious, makes observations, and asks questions. Inform your students that they will be traveling to BioTrek *as scientists*. They should look at the world around them and not be afraid to ask questions. Explain that most scientists have notebooks in which they record their observations. They will be making a journal as well, so that when they come back from their trip they may write down what they observed. Provide them with materials to design their own front and back cover, and aid them in stapling/binding it together with several blank pages. Allow them to title it what they wish. The second page is the name page. Have them write their name, and underneath, draw themselves as scientists. Upon their return, designate certain pages for specific things.

- Page one: Have them draw their favorite animal. Ask them to specify (draw arrows

pointing to) features that made it special. (i.e. claws, dewlap, and third eye for the iguana).

- Page two: Have them draw the place where the animal would normally be found.
- Page three: Have them draw what the animal liked to eat.
- Page four: Have them draw other things that would make the animal happy.
 - Congratulate them on their drawings so far, for they are making observations, just like good little scientists. Have them share some of their observations out loud. Ask them if, based on their observations, there are certain things that *all* animals need. Do plants need the same things? Do humans need the same things?
- Page five: Have them draw a Venn diagram of the different needs of plants and animals. For example, plants need soil/nutrients and sun. Animals need food and shelter. But both need water and air. Have them circle the needs shared by plants and animals.
- Page six: Free rein. Have them draw their favorite part of BioTrek. Feel free to share that with us.

This Scientific Journal Belongs To.

Dr.
